GOVERNMENT OF INDIA
NEW AND RENEWABLE ENERGY
LOK SABHA

UNSTARRED QUESTION NO:749
ANSWERED ON:21.07.2016
Energy from Human Waste
Azad Shri Kirti (JHA)

Will the Minister of NEW AND RENEWABLE ENERGY be pleased to state:

a. whether the Government is aware that the gas emanating from the rotting human waste can be utilised as a source of energy besides improving the sanitation scenario;
b. if so, whether the Government has made any assessment in this regard;
c. if so, the details thereof;
d. whether this source of renewable energy can be developed; and
e. e.if so, the details thereof and if not, the reasons therefor?

Answer

MINISTER OF STATE FOR POWER, COAL , NEW & RENEWABLE ENERGY & MINES (SHRI PIYUSH GOYAL)
(a): Yes, Madam. By processing the human waste scientifically through Anaerobic Digesters, biogas can be produced, which can be utilized as a source of energy for cooking, heating, lighting and generating electricity and this process helps in improving the sanitation.
(b) & (c): No, Madam. However, the human waste is a potential feedstock for generating biogas that can be deployed for various applications. Presently, under the scheme of National Biogas and Manure Management Programme (NBMMP) of the Ministry of New and Renewable Energy, the household biogas plants based on cattle dung waste are linked with the sanitary toilets. This adoption mainly depends upon the acceptability of the individual household in the rural and semi-urban areas of the country.
(d) & (e): Yes, Madam. The large systems of human excreta processing through biogas plants can be deployed by following effective methods and procedures with fulfillment of certain requirements such as −
i. Surface water and subsoil water-table should not be contaminated.
ii. There should be no contamination of ground water.
iii. The per capita use of water for toilet should be restricted to the limit as required for anaerobic digestion of human waste.
iv. The system should not be accessible to flies or animals.
v. There should be freedom from smell or unsightly conditions.
vi. The effluent left out of the biogas plants should require no hand -handling and requires safe and covered disposal.

vii. The human excreta based biogas plant leftover slurry should not be permitted to be touched by open hands while transforming it into organic manure which can be used for different purpose.
viii. The method used should be simple and inexpensive in construction and operation.
ix. There should not be any danger of air pollution.
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